UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Date: 11 August 2016

Subject: **Pyriproxyfen.** Occupational and Residential Exposure Assessment for a Proposed Use on Pet Collars.

PC Code: 129032
Registration Nos.: 2517-NEW
Petition No.: NA
Risk Assessment Type: Occupational/Residential Exposure Assessment
TXR No.: NA
MRID No.: NA

DP Barcode: D435167
Decision No.: 520255
Regulatory Action: Section 3
Case No.: NA
CAS No.: 95737-68-1
40 CFR: 180.510

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The Registration Division (RD) requested that the Health Effects Division (HED) conduct an exposure and risk assessment of the proposed use on pet collars for the proposed new product, SPCP4 Plus 1 (EPA Reg. #2517-NEW).

Pyriproxyfen [2-[1-methyl-2-(4-phenoxyphenoxy)ethoxy]pyridine] is a broad spectrum pyridine-based insect growth regulator used to control a variety of insects in agricultural and non-agricultural areas.

Proposed Use

In the current action, the registrant, Sergeant's Pet Care Products, Inc., proposes a new pesticide registration of SPCP4 Plus 1 formulated end use product label, containing 1% pyriproxyfen (EPA Reg. #2517-NEW), for use as a pet collar. The collars are proposed in three sizes: small (0.65 oz), medium (0.85 oz) and large (0.97 oz).

Exposure Profile

There is a potential for residential exposure to pyriproxyfen over a long-term duration from contacting animals wearing the collar. The use pattern associated with the proposed use on pet collars has been evaluated previously (D411158, I. Nieves, 9/10/2013). In the previous assessment, the application method and exposure pattern are the same as that proposed. The amount of active ingredient (ai) evaluated was 4.63×10^{-4} pounds (lbs) ai per collar.

Residential Exposure/Risk

The previously assessed application rate of 4.63×10^{-4} lbs ai/collar yielded post-application margins of exposure (MOEs) of 830 for adults (dermal) and 320 for children (dermal plus incidental ingestion), compared to the level of concern (LOC) of 100; and therefore were not of concern. The application rate for the proposed large-size collar is 6.06×10^{-4} lb ai/collar. When scaling the previously assessed rate to that of the proposed new product, the adjusted MOEs are 630 for adults and 240 for children, which are also not of concern relative to the LOC of 100.

Occupational Exposure/Risk

The residential exposure assessment for the proposed use is considered protective of occupational exposure.